

# Guidelines

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**Interim List of Household Products and Active Ingredients for Disinfection of COVID-19 (Coronavirus Disease 2019)**

Overview	<h2>Interim List of Household Products and Active Ingredients for Disinfection of COVID-19 (Coronavirus Disease 2019)</h2> <p><i>Revised on 12 February 2020</i> <i>First released on 04 February 2020</i></p> <p>Many general household products contain the appropriate concentrations of active ingredients (A.I.) that are known to inactivate coronaviruses. As the COVID-19 is new, no study has been conducted directly on the virus. However, because COVID-19 is a coronavirus, published scientific studies using coronaviruses have been referenced.</p> <p>For general precautionary cleaning, detergent and water are adequate. For disinfection of areas that are very likely to be contaminated with COVID-19 (e.g. bedroom of a person confirmed to have a COVID-19 infection), disinfectant/cleaning products listed in Table 1 can be used. The active ingredients and their effective concentrations listed in table 2 have been shown by published scientific studies to be effective against coronaviruses. Both tables will be updated as data from more products are gathered, and as more products are assessed to be appropriate.</p> <p>Disclaimer: Any posting shown in the listing does not constitute or imply any affiliation, relationship or sponsorship by NEA of the products in the listing. <b>Every product needs to be used in the right way and according to specification.</b> NEA will not be responsible for any loss or damage arising from or incidental to any use of products/services in the listing.</p> <p>In addition to the use of cleaning agents, other treatments effective against coronavirus include steam and heat treatment.</p> <p>Important points to note:</p> <ol style="list-style-type: none"><li>1. <b>Check the labels and use according to instruction, and be</b></li></ol>
Cleaning of Public Areas	
Cleaning Industry	
Toilets Management	
<b>Environmental Cleaning Guidelines</b>	
<b>Guidelines</b>	
Interim Guidelines for Environmental Cleaning and Disinfection of Areas Exposed to Confirmed Case(s) of COVID-19 (Coronavirus Disease 2019) in Non-Healthcare Commercial Premises	
Interim Guidelines for Environmental Cleaning and Disinfection in Residences That May Be Exposed to the COVID-19 (Coronavirus Disease 2019)	
Interim Guidelines for Environmental Cleaning and Disinfection of	

Premises With  
Transient Exposure  
to Confirmed  
Cases(s) of the  
COVID-19  
(Coronavirus  
Disease 2019)

**Interim List of  
Household  
Products and  
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Advisories

Posters

Vox

Social Feed

**aware of the potential hazard of each product.**

2. Avoid contact with eye and skin when handling cleaning products, and keep them away from children.
3. Do not mix different cleaning products and use in a well-ventilated area.
4. For disinfection of highly contaminated surfaces or material, avoid the use of spray, and allow appropriate time needed for disinfection (refer to product instruction).
5. This product list should be read in conjunction with the Guidelines and Advisories issued by NEA with instruction and guidelines on how to conduct proper cleaning and disinfection of premises.

**Table 1 List of Household Disinfectants/Cleaning Products Effective Against Coronaviruses**

Additional precautions for each product are denoted by the respective alphabets:

- A. Corrosive to metals, wipe away residues with wet cloth after 10 minutes.
- B. Flammable at high concentration. Keep away from heat/sparks/open flames/hot surfaces.
- C. Not all recommended dilutions stated on the label meet the concentration requirement indicated in Table 2. Adjustment in dilution ratio may be required.

**1.1 General**

	<b>Product Name</b>	<b>Active Ingredients</b>	<b>Additional Precautions</b>
1.	Clorox Disinfectant Wipes	Benzalkonium chloride* (0.184%)	-
2.	Clorox Scentiva Disinfectant (Various Scents)	Benzalkonium chloride* (0.3%)	-
3.	Dettol Anti-bacterial Surface Cleanser Trigger Spray	Benzalkonium chloride* (0.096%)	-
4.	Mr Muscle Multi-Purpose Cleaner (Various Scents)	Benzalkonium chloride* (0.1-0.5%)	C
5.	Simple Green Clean Finish Disinfectant Cleaner	Benzalkonium chloride* (0.15%)	-
6.	Softess Anti-Bacterial Wet Wipes (Various	Benzalkonium chloride* (0.08%)	-

	Scent)		
7.	Dettol Antiseptic Disinfectant Liquid	Chloroxylenol (4.8%)	C
8.	Dettol Antiseptic Germicide	Chloroxylenol (4.8%)	C
9.	Walch Antiseptic Germicide	Chloroxylenol (4.5-5.5%)	C
10.	Jackie Disinfectant & Air-Freshener	Ethyl Alcohol (>80%)	B
11.	Jackie Disinfectant Spray	Ethyl Alcohol (>80%)	B
12.	BestChem Disinfectant (250 mL, 500 mL)	Isopropyl Alcohol (60-70%)	B
13.	Budget Bleach	Sodium hypochlorite (3.25%)	A, C
14.	Clorox Clean-Up Cleaner + Bleach	Sodium hypochlorite (1.84%)	A
15.	Essential Waitrose Thick Original Bleach	Sodium hypochlorite (2.5-5%)	A, C
16.	Giant All Purpose Household Bleach	bleachSodium hypochlorite (>=5.25%)	A, C
17.	Mr Muscle Mold & Mildew	Sodium hypochlorite (1-5%)	A

## 1.2 Bathroom

S/N	Product Name	Active Ingredients(s)	Additional Precautions
1	Dettol Healthy Clean Bathroom	Benzalkonium Chloride* (0.1%)	-
2	Mr Muscle Bathroom 5 in 1	Benzalkonium Chloride* (0.1-0.5%)	C
3	Clorox Toilet Bowl Cleaner with Bleach	Sodium Hypochlorite (2.4%)	A
4	Magiclean Bathroom Stain & Mold Remover	Sodium Hypochlorite (2.7%)	A
5	Magiclean Toilet Bleach Powder Cleaner	Sodium Hypochlorite (3.2%)	A, C
6	Mr Muscle Foaming Bleach Gel (Various Scents)	Sodium Hypochlorite (1-5%)	A

## 1.3 Kitchen

S/N	Product Name	Active Ingredients(s)	Additional Precautions
1	Dettol Healthy Clean Kitchen	Benzalkonium Chloride* (0.1%)	-
2	Mr Muscle Kitchen Cleaner	Benzalkonium Chloride* (0.1-0.5%)	-
3	Magiclean Kitchen Bleach	Sodium Hypochlorite (6%)	A, C

#### 1.4 Others

S/N	Product Name	Active Ingredients(s)	Additional Precautions
1	Magiclean Pipe & Sink Cleaner	Sodium Hypochlorite (2.7%)	A
2	Magiclean Pipe & Sink Declogger	Sodium Hypochlorite (2.9%)	A
3	Mr Muscle Sink & Drain Declogger	Sodium Hypochlorite (1-5%)	A

\*Alternative name: alkyl dimethyl benzyl ammonium chloride

Recommendations are based on the information of the active ingredients and concentrations declared by the suppliers.

**Table 2. Active Ingredients and their Working Concentrations Effective Against Coronaviruses**

#### S/N Active Ingredient (A.I.)

1. Sodium hypochlorite (0.05 – 0.5%)<sup>1,2</sup>
2. 70% ethyl alcohol<sup>1</sup>
3. Povidone-iodine (1% iodine)<sup>1</sup>
4. Chloroxylenol (0.12%)<sup>3</sup>
5. 50% isopropanol<sup>4</sup>
6. 0.05% benzalkonium chloride\*<sup>4</sup>
7. 50ppm iodine in iodophor<sup>4</sup>
8. 0.23% sodium chlorite<sup>4</sup>
9. 1% cresol soap<sup>4</sup>  
(sodium alkyl-ben-zene sulfonate)
10. Accelerated Hydrogen Peroxide (0.5%)<sup>5</sup>

<sup>1</sup> Sattar SA, Springthorpe VS, Karim Y, Loro P. (1989). Chemical disinfection of non-porous inanimate surfaces experimentally contaminated with four human pathogenic viruses. *Epidemiol. Infect.* 102:493-505; Tested against coronavirus 229E.

<sup>2</sup> Lai, M. Y. Y., Cheng, P. K. C., & Lim, W. W. L. (2005). Survival of Severe Acute Respiratory Syndrome Coronavirus. *Clinical Infectious Diseases*, 41(7), e67-e71.

<sup>3</sup> Dellanno, C., Vega, Q., & Boesenberg, D. (2009). The Antiviral action of common household disinfectants and antiseptics against murine hepatitis virus, a potential surrogate for SARS coronavirus. *American Journal of Infection Control*, 37(8), 649-652. doi:10.1016/j.ajic.2009.03.012

<sup>4</sup> Saknimit M, Inatsuki I, Sugiyama Y, Yagami K. (1988) Virucidal efficacy of physico-chemical treatments against coronaviruses and parvoviruses of laboratory animals. *Jikken Dobutsu*. 37:341-5; Tested against canine coronavirus

<sup>5</sup>Omisbahakhsh, N., & Sattar, S. A. (2006). Broad-spectrum microbicidal activity, toxicologic assessment, and materials compatibility of a new generation of accelerated hydrogen peroxide-based environmental surface disinfectant. *American Journal of Infection Control*, 34(5), 251-257

Any company marketing disinfectants that are effective against coronaviruses can contact us at 1800-CALL NEA (1800-2255 632) or submit your enquiries electronically via the [Online Feedback Form](#) or myENV mobile application.